

# *Quarry Creek Master Plan*

## *Draft Environmental Impact Report*

*SCH#: 2012021039*



Prepared for:



City Of  
Carlsbad

Prepared By:

HDR

*October 2012*

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## Quarry Creek Master Plan Carlsbad, California

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*Prepared for*  
**City of Carlsbad**  
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### ACRONYMS AND ABBREVIATIONS

AAC	All-American Canal
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ac	Acre/Acres
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Trip
AEP	Annual exceedance probability
AF	Acre feet
AFY	Acre feet per year
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
ANFO	Ammonium nitrate and fuel oil
AP Act	Alquist-Priolo Special Studies Zone Act
APN	Assessor's Parcel Number
AQIA	Air Quality Impact Assessment
AST	Aboveground storage tank
ASTM	American Society for Testing Materials
BACM	Best Available Control Measures
BAU	Business as usual
BMI	Benthic macroinvertebrate
BMP	Best Management Practice
BTR	Biological Technical Report
BVCER	Buena Vista Creek Ecological Reserve
C	Centigrade
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAGN	Coastal California gnatcatcher
Cal-EPA	California Environmental Protection Agency
Cal-IPC	California Invasive Plant Council
Cal-OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention Program
CalEPA	California's Environmental Protection Agency
CAP	Corrective Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Combat Auto Theft
CB	Carlsbad
CBC	California Building Code
CC	Coachella Canal
CCARGRP3.1	California Climate Action Registry General Reporting Protocol Version 3.1
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code

CFD	Community Facilities District
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CGS	California Geologic Survey
CH <sub>4</sub>	Methane
CIP	Capital Improvement Program
City	City of Carlsbad
CLOMR	Conditional Letter of Map Revision
cm	Centimeter
CMC	Carlsbad Municipal Code
CMP	Congestion Management Program
CMWD	Carlsbad Municipal Water District
CNDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
COCs	Contaminates of concern
CORTESE	Hazardous Waste & Substances Sites List
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CTR	California Toxics Rule
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CUSD	Carlsbad Unified School District
CWA	Clean Water Act
CY	Cubic Yards
CYA	C. Young Associates
DARE	Drug Abuse Resistance Education
dB	Decibel
dBA	Decibel, A-Weighted
DCSS	Diegan Coastal Sage Scrub
DDT	Dichlorodiphenyltrichloroethane
DEH	Department of Environmental Health (San Diego County)
DO	Dissolved oxygen
DOC	Department of Conservation (California)
DPM	Diesel particulate matter
du	Dwelling unit
du/ac	Dwelling units per acre
DWR	Department of Water Resources (California)
EB	Eastbound
EDR	Environmental Data Resources, Inc.
EDU	Equivalent Density Unit
EDUB	Excess Dwelling Unit Bank
EIB	Emission Inventory Branch
EIR	Environmental Impact Report
EMI	Emissions Inventory Data
EOC	Emergency Operations Center

EPA	Environmental Protection Agency
ESA	Endangered Species Act, Environmental Site Assessment
EWA	Encina Wastewater Authority
EWPCF	Encina Wastewater Pollution Control Facility
F	Fahrenheit
FCS	Fuel contaminated soil
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, Rodenticide Act
FINDS	Facility Index System/Facility Registry System
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FSZ	Farmland Security Zone
FT	Foot/feet
FTA	Federal Transit Administration
g	Peak ground acceleration
GCC	Global climate change
GHG	Greenhouse gas
GIS	Geographic Information System
GMCP	Growth Management Control Point
GMP	Growth Management Plan
GPA	General Plan Amendment
GPD	Gallons per Day
H <sub>2</sub> S	Hydrogen sulfide
HA	Hydrologic Area
HAP	Hazardous Air Pollutant
HAZNET	Facility and Manifest Data
HCM	Highway Capacity Manual
HDP	Hillside Development Permit
HEC-RAS	Hydrologic Engineering Centers - River Analysis System
HFC	Hydrofluorocarbon
HHW	Household Hazardous Waste
HIST UST	Historical Underground Storage Tanks
HMMD	San Diego County DEH Hazardous Materials Management Division
HMP	Habitat Management Plan
HMP	Hydromodification Management Plan
HSA	Hydrologic Subarea
HU	Hydrologic Unit
HWCL	Hazardous Waste Control Law
Hz	Hertz
I-5	Interstate 5
ICU	Intersection capacity utilization
IID	Imperial Irrigation District
IND	Industrial service supply
I/O	Inbound/Outbound
IRA	Interim remedial action
IRC	International Residential Code
ITE	Institution of Transportation Engineers

kWh	Kilowatt hours
KSF	Thousand Square Feet
lbs	Pounds
LBV	Least Bell's vireo
LCC	Land Capability Classification
LCFS	Low Carbon Fuel Standard
Leq	Equivalent Continuous Noise Level
LESA	Land Evaluation and Site Assessment
LFMP	Local Facilities Management Plan
LFMZ	Local Facilities Management Zone
LOMR	Letter of Map Revision
LOS	Level of Service
LPH	Liquid-phase hydrocarbons
LRFMP	Long Range Facilities Master Plan
LUST	Leaking Underground Storage Tank
M	Industrial Zoned
MBTA	Migratory Bird Treaty Act
MEC	MEC Analytical, Inc.
MG	Million gallons
mg/kg	Milligrams per kilogram
mg/m <sup>3</sup>	Milligrams per cubic meter
MGD	Million gallons per day
MHCP	Multiple Habitat Conservation Program
MLD	Most Likely Descendant
MMBtu	Million metric British thermal units
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MPH	Miles per hour
MPO	Metropolitan Planning Organization
MS4s	Municipal Separate Stormwater Sewer Systems
MSL	Mean sea level
MTBE	methyl-tert-butyl ether
MUN	Municipal and Domestic Supply Habitat
Mw	Maximum earthquake magnitude
MWD	Metropolitan Water District
N/A	Not applicable
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
N/B	Not built
NB	Northbound
NCCP	Natural Communities Conservation Planning
NCP	National Contingency Plan
NCTD	North County Transit District
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEP	National Emphasis Program
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act

NINA	Noise Impact Notification Area
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	Nitrogen Dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO <sub>x</sub>	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
N <sub>2</sub> O	Nitrous oxide
OAQPS	Office of Air Quality Planning and Standards
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OS	Oceanside
OS	Open Space
OSHA	Occupational Safety Health Administration
O <sub>3</sub>	Ozone
PA	Planning Area
PAR	Property Analysis Record
Pb	Lead
PC	Planned Community
PEL	Permissible Exposure Limit
PGA	Peak ground acceleration
PM <sub>10</sub>	Particulate Matter of 10 Microns or Less in Diameter
PM <sub>2.5</sub>	Particulate Matter of 2.5 Microns or Less in Diameter
PMP	Perpetual Management, Maintenance, And Monitoring Plan
ppm	Parts per million
PPV	Peak particle velocity
PRC	Public Resources Code
Q <sub>2</sub>	Two-year flow
RAQS	Regional Air Quality Standards
RARE	Rare, Threatened, or Endangered Species (
RCRA	Resource Conservation and Recovery Act
REC-1	Contact Water Recreation
REC-2	Non-Contact Water Recreation
RH	Residential High
RHNA	Regional Housing Needs Assessment
RL	Residential Low
RLM	Residential Low Medium
RMH	Residential-Medium-High
ROC	Reactive Organic Compounds
ROG	Reactive Organic Gases
ROW	Right-of-Way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment and Mitigation
SANDAG	San Diego Association of Governments
SANTEC	San Diego Traffic Engineers' Council
SARA	Superfund Amendments and Reauthorization Act

SB	Senate Bill
SB	Southbound
SCAQMD	South Coast Air Quality Management District
SCCWRP	Southern California Coastal Water Research Project
SCH	State Clearinghouse
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDC	Seismic Design Categories
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas and Electric
SDP	Site Development Plan
SF	Square Foot/Square Feet
SF <sub>6</sub>	Sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHRC	State Historical Resources Commission
SIP	State Implementation Plan
SMARA	Surface Mining and Recovery Act
SO <sub>2</sub>	Sulfur Dioxide
SO <sub>x</sub>	Sulfur Oxides
SPCC	Spill Prevention Control and Countermeasure Plan
SR-78	State Route 78
SUP	Special Use Permit
SUSMP	Standard Urban Storm Water Mitigation Plan
SWAMP	Surface Water Ambient Monitoring Program
SWAT	Special Weapons and Tactics
SWEEPS	Statewide Environmental Evaluation and Planning System US
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWQCB	State Water Quality Control Board
SWRCB	State Water Resources Control Board
T-BACT	Toxics Best Available Control Technology
TAC	Toxic Air Contaminant
TBA	Tert-butyl alcohol
TCP	Traditional Cultural Property
TMDL	Total maximum daily load
TOC	Total organic carbon
TPH	Total petroleum hydrocarbons
UBC	Uniform Building Code
UFC	Uniform Fire Code
USACE	U.S. Army Corps of Engineers
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	Volume to Capacity
VdB	Vibration velocity
VMT	Vehicle Miles Traveled

## Acronyms and Abbreviations

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VOC	Volatile Organic Compound
VRP	Visibility Reducing Particle
WB	Westbound
Weston	Weston Solutions, Inc.
WSA	Water Supply Assessment
µg/l	Micrograms per liter
µg/m <sup>3</sup>	Micrograms per cubic meter
0%/0	Zero percent per zero

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